

# SAE 2017 Government/Industry Meeting

## Technical Session Schedule

As of 01/31/2017 07:40 pm

Wednesday, January 25

### Cyber Security and Privacy

Session Code: G105

Room 145 AB

Session Time: 10:30 a.m.

This session will address the protection of vehicular electronic systems, communication networks, control algorithms, software, transportation system users, and underlying data from malicious attacks, unauthorized access, or manipulation. Specific topics may include design for security of automotive control systems. Also, privacy guidelines and intrusion detection and response may be covered.

Organizers - Arthur Carter, National Hwy Traffic Safety Admin; Thomas Forest, General Motors LLC

Time	Paper No.	Title
10:30 a.m.	ORAL ONLY	<b>Automotive Cybersecurity Guidelines</b> Cem Hatipoglu, NHTSA
10:50 a.m.	ORAL ONLY	<b>Heavy Vehicle Cybersecurity Activity Update</b> Urban Jonson, National Motor Freight Traffic Assoc. Inc.
11:10 a.m.	ORAL ONLY	<b>Joint ISO/SAE activity</b> Lisa T. Boran, Ford Motor Company
11:30 a.m.	ORAL ONLY	<b>Cybersecurity assurance testing workgroup</b> Mike Ahmadi, Synopsys Inc.
11:50 a.m.	ORAL ONLY	<b>SAE VESS subcommittee on Hardware Security</b> Daniel J. Selke, Mercedes-Benz USA LLC
12:10 p.m.	ORAL ONLY	<b>Pathway Towards Globally Harmonized Requirements</b> Darren Handley, Department For Transport

Wednesday, January 25

### Biomechanics

Session Code: G106

Room 145 AB

Session Time: 2:30 p.m.

Presentations will focus on efforts to understand the human response to impact and associated injury risk. Topics in this session may include injury assessments in various crash modes and the development of new crash dummies and human body models. This session also addresses injury prediction methodologies and laboratory test procedures. Real-world epidemiology studies (CIREN) on human injuries may also be presented

Organizers - Kevin Moorhouse, NHTSA; Ravi Tangirala, Hyundai Motor Co.

Time	Paper No.	Title
2:30 p.m.	ORAL ONLY	<b>Injury Patterns in Motor-Vehicle Crashes in the United States, 1998-2014</b> Kathleen DeSantis Klinich, Univ. of Michigan - Ann Arbor
2:50 p.m.	ORAL ONLY	<b>Investigation of the Side Impact Response of Elderly Occupants</b> Benjamin Kelly Shurtz, Ohio State Univ.
3:10 p.m.	ORAL ONLY	<b>Quantification of in situ whole brain deformation under rotational impact using sonomicrometry</b> Jason Lee Forman, Univ. of Virginia
3:30 p.m.	ORAL ONLY	<b>Evaluation of the RibEye<sub>z</sub> Multipoint Deflection Measurement System Installed in the WorldSID-50M Dummy</b> Heather Rhule, National Highway Traffic Safety Administration

<b>3:50 p.m.</b>	<b>ORAL ONLY</b>	<b>Small female Hybrid III dummy and GHBMC human body model in frontal crashes</b> <i>Maika Katagiri, Takata</i>
<b>4:10 p.m.</b>	<b>ORAL ONLY</b>	<b>R&amp;R assessment of THOR in sled environment</b> <i>Philipp Wernicke, BMW Group</i>

### Wednesday, January 25

#### Opening Keynote Address

**Session Code:** GIKEYNOTE1

**Room 146 AB**

**Session Time:** 9:00 a.m.

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
<b>9:00 a.m.</b>	<b>ORAL ONLY</b>	<b>Learn More About the Keynote</b> <i>Christopher Grundler, US Environmental Protection Agency</i>

### Wednesday, January 25

#### Vehicle Safety Ratings

**Session Code:** G100

**Room 146 AB**

**Session Time:** 10:30 a.m.

This session explores various vehicle ratings of safety technologies, including those associated with crash avoidance and crashworthiness. Presentations will discuss the development and implementation of performance metrics. NCAP ratings (U.S., European, or Japan) may be addressed. Other standardized tests and ratings from Consumers Union, IIHS, Thatcham, and other non-governmental groups will be presented.

**Organizers -** *Schuyler St. Lawrence, Toyota Motor North America Inc.; David S. Zuby, Insurance Institute for Highway Safety*

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
<b>10:30 a.m.</b>	<b>ORAL ONLY</b>	<b>Euro NCAP 5-star requirements for 2018 and beyond</b> <i>Richard Schram, Euro NCAP</i>
<b>10:45 a.m.</b>	<b>ORAL ONLY</b>	<b>Vehicle Design Challenges for Crash Safety Ratings &amp; An OEM perspective</b> <i>Madan Gopal, Tesla Motors Inc.</i>
<b>11:00 a.m.</b>	<b>ORAL ONLY</b>	<b>Development of a global 3-D soft target for ADAS testing</b> <i>Matthew J. Avery, Thatcham Research</i>
<b>11:15 a.m.</b>	<b>ORAL ONLY</b>	<b>Development of Euro NCAP assessment for Lane Support Systems</b> <i>Matthew J. Avery, Thatcham Research</i>
<b>11:30 a.m.</b>	<b>ORAL ONLY</b>	<b>On-Vehicle Headlamp Aiming Improvements</b> <i>Michael Shin Hong, Toyota Motor Corp.</i>
<b>11:45 a.m.</b>	<b>ORAL ONLY</b>	<b>Implications of Proposed USNCAP Requirements</b> <i>Philipp Wernicke, BMW Group</i>
<b>12:15 p.m.</b>	<b>ORAL ONLY</b>	<b>Assessing consumer interest in safety ratings using iihs.org web traffic data</b> <i>Matthew L. Brumbelow, Insurance Institute for Highway Safety</i>

### Wednesday, January 25

## Connected Vehicles

**Session Code:** G101

**Room 146 AB**

**Session Time:** 2:30 p.m.

This session focuses on technologies for vehicle-to-vehicle communications and their applications to safety and driver assistance. Vehicle-to-Infrastructure technologies and applications may also be presented, as well as topics related to human factors guideline development, and potential influence on future regulations on active safety

**Organizers -** Sue Bai, Honda; Joshua Fikentscher, NHTSA

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
2:30 p.m.	ORAL ONLY	<b>Future Mobility</b> <i>Matthew Smith, Michigan Dept. of Transportation</i>
2:45 p.m.	ORAL ONLY	<b>Connected and Automated Vehicles in Columbus Smart City Challenge</b> <i>Kevin Dopart, US Dept. of Transportation</i>
3:00 p.m.	ORAL ONLY	<b>V2V Communications: Next Steps for NHTSA Research</b> <i>Bob Kreeb, NHTSA</i>
3:15 p.m.	ORAL ONLY	<b>Connected vehicle deployment models and spectrum allocation</b> <i>John Kenney, Toyota Info Technology Center</i>
3:30 p.m.	ORAL ONLY	<b>Connected Cars and Motorcycles - How to Bring Motorcycle Safety to a New Level</b> <i>Markus Tobias Bauer, BMW Group</i>
3:45 p.m.	ORAL ONLY	<b>Autonomous Vehicles: From the Driver's Seat</b> <i>Chris Mullen, State Farm Insurance Co.</i>
4:00 p.m.	ORAL ONLY	<b>Shaping the Future of Mobility</b> <i>Christopher Borroni-Bird, Qualcomm Inc.</i>

## Wednesday, January 25

## Light Duty GHG/CAFE

**Session Code:** G207

**Room 146 C**

**Session Time:** 10:30 a.m.

In 2016, EPA, NHTSA and CARB jointly issued their Draft Technical Assessment Report, the first formal step in the "Midterm Evaluation" of upcoming fuel economy and vehicle greenhouse gas (GHG) standards. This session examines the latest research and policy dialogue surrounding it and the Proposed Determination, including: regulatory program status, opportunities and challenges facing the light duty sector, technologies anticipated to play a role through 2025, and consumer choice implications.

**Organizers -** Kevin Bolon, US Environmental Protection Agency; Kenneth R. Katz, National Hwy Traffic Safety Admin; James Kliesch, American Honda Motor Co. Inc.

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
10:30 a.m.	ORAL ONLY	<b>GM and Industry Developments through 2016, and a Look to the Future</b> <i>Barbara Kiss, General Motors LLC</i>
10:50 a.m.	ORAL ONLY	<b>GHG and CAFE: Mazda's unique approach and challenges</b> <i>Daniel V. Ryan, Mazda North American Operations</i>
11:10 a.m.	ORAL ONLY	<b>Internal Combustion Engine and Powertrain Developments to Help Meet Current 2025 CAFE/GHG Standards</b> <i>Pierre-Jean Cancalon, Honeywell Transportation Systems</i>

11:30 a.m.	ORAL ONLY	<b>Fuel Economy and Today's Vehicle Buyer: Insights from KBB and Autotrader</b> Rebecca Lindland, Kelley Blue Book/Cox Automotive
11:50 a.m.	ORAL ONLY	<b>NHTSA's CAFE Rulemaking for MY 2022 and Beyond</b> James Tamm, NHTSA
12:10 p.m.	ORAL ONLY	<b>EPA's Assessment for the Midterm Evaluation: Technologies and Consumer Acceptance</b>  Michael Olechiw, US Environmental Protection Agency

### Wednesday, January 25

#### Advanced Materials/Lightweighting

**Session Code:** G208

**Room 146 C**

**Session Time:** 2:30 p.m.

Developments in the realm of lightweight materials for automotive use continue to be announced by the industry and by academia. This session will provide new and updated information on new generation of materials. Additionally, this session will focus on the key topics involved in Life-Cycle-Analysis of light-weight materials including practices and developments in material recyclability.

**Organizers -** Cheryl Caffrey, US EPA; William J. Joost, Department of Energy; Vinay Nagabhushana, Department Of Transportation

Time	Paper No.	Title
2:30 p.m.	ORAL ONLY	<b>The Evaluation of Vehicle Mass Reduction and Material Choice in Life Cycle Assessments: Key Factors and Dynamic Industries</b> Troy Hottle, ORISE Post-doctorate Fellow, US EPA Office of Res & Dev
2:50 p.m.	ORAL ONLY	<b>Impact of Advanced Aluminum Materials on Vehicle Mass and Cost and Aluminum End of Life Recycling Study Summary</b> Doug Richman, Kaiser Aluminum
3:10 p.m.	ORAL ONLY	<b>Summary of Magnesium Automotive Applications, Global Supply Chain and Environmental Impact</b> Timothy W. Skszek, Magna International Inc.
3:30 p.m.	ORAL ONLY	<b>Current Innovations in the North American Steel Industry</b> David W. Anderson, Steel Market Development Institute
3:50 p.m.	ORAL ONLY	<b>Improving the Economics and Throughput of Carbon Fiber Composite Manufacturing</b> Philip Taynton, Mallinda
4:10 p.m.	ORAL ONLY	<b>Computational Design Challenges for Thermoplastic Carbon Fiber Reinforced Body-in-White Components in a Vehicle Crash Application</b> Lennart Keuthage, BMW AG

### Wednesday, January 25

#### Advanced Automatic Collision Notification

**Session Code:** G110

**Room 147 A**

**Session Time:** 2:30 p.m.

This session focuses on the adoption and implementation of AACN in the U.S. Topics include development and testing of AACN systems, technical telematics considerations, and efforts related to adoption of AACN data by the emergency response and medical communities.

**Organizers -** John J. Combost, Nissan Technical Center NA; Ellen Lee, NHTSA

<i>Time</i>	<i>Paper No.</i>	<i>Title</i>
2:30 p.m.	ORAL ONLY	<b>OnStar's Role in the Continuum of Emergency Response</b> Cathy Bishop, OnStar Corporation
2:45 p.m.	ORAL ONLY	<b>AACN Pilot study with King County EMS, Seattle CIREN Center</b> Robert Kaufman, HIPRC
3:00 p.m.	ORAL ONLY	<b>Next Generation AACN: Overcoming Today's Obstacles</b> Randall Gellens, Core Technology Consulting
3:15 p.m.	ORAL ONLY	<b>Building the Public Safety Infrastructure</b> Trey Forgety, National Emergency Number Association
3:30 p.m.	ORAL ONLY	<b>Engaging 911 and Emergency Medical Services Stakeholders</b> Laurie Flaherty, NHTSA Office of EMS
3:45 p.m.	ORAL ONLY	<b>Detecting AACN Communications During Crash Test</b> John Martin, NHTSA
4:00 p.m.	Panel	<b>Panel Discussion</b>

### Wednesday, January 25

## Electric Drive - Infrastructure: The role of Government, OEMs and Others in Funding and Deploying Low Carbon Infrastructure

**Session Code:** G202

**Room 147 B**

**Session Time:** 10:30 a.m.

This session will discuss the current situation and the nexus of government and industry in deploying infrastructure as a necessary component of vehicle regulatory compliance and a societal transformation to low GHG mobility.

**Organizers -** Robert Graham, US Dept. of Energy; Ian Musselman, Continental Automotive; Aaron M. Sobel, US EPA

<i>Time</i>	<i>Paper No.</i>	<i>Title</i>
10:30 a.m.	ORAL ONLY	<b>Hydrogen Refueling Infrastructure Status, Opportunities and Challenges</b> Robert R. Wimmer, Toyota Motor North America Inc.
10:50 a.m.	ORAL ONLY	<b>Electric Vehicle Charging Corridors: A National Vision</b> Andrew Wishnia, Department Of Transportation
11:10 a.m.	ORAL ONLY	<b>Enabling Rapid EV Charging: A Technology Gap Assessment</b> Christopher Michelbacher, Department of Energy
11:30 a.m.	ORAL ONLY	<b>State Models for Promoting Electric Vehicle Infrastructure</b> Kathryn Zyla, Georgetown University
11:50 a.m.	ORAL ONLY	<b>Financial Performance of Urban and Rural DC Fast Charging Complexes</b>  Nick Nigro, Atlas Public Policy
12:10 p.m.	ORAL ONLY	<b>Roundtable Discussion with Session Moderator</b> Robert Graham, US Dept. of Energy

### Wednesday, January 25

## Electric Drive - Markets & Vehicles

**Session Code:** G203

**Room 147 B**

**Session Time:** 2:30 p.m.

Joined by hydrogen fuel cell vehicles, electric drive technology is providing model offerings with zero or near-zero tailpipe emissions. However, adoption rates of these technologies have not progressed as quickly as many – including government regulators – had hoped. We examine electric drive technology, market receptivity, and the role technology policies. Government and industry experts will share perspectives on technology trends, policy objectives and markets incentives, and others items.

**Organizers -** Robert Bienenfeld, American Honda Motor Co. Inc.; Ahmad Pesaran, US Department of Energy; Michael Safoutin, US Environmental Protection Agency

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
2:30 p.m.	ORAL ONLY	<b>Consumer Receptivity To Electric Drive Technology</b> Alexander Edwards, Strategic Vision Inc.
2:50 p.m.	ORAL ONLY	<b>Updates on Product Offerings and Policies Moderated by:</b> Ahmad Pesaran, US Department of Energy
2:50 p.m.	ORAL ONLY	<b>Overview of PEVs on the Market</b> Genevieve Cullen, Electric Drive Transportation Assoc.
3:10 p.m.	ORAL ONLY	<b>Overview of FCVs on the Market</b> Robert Bienenfeld, American Honda Motor Co. Inc.
3:30 p.m.	ORAL ONLY	<b>Updates on PEV policies</b> Michael J. McCarthy, California Air Resources Board
3:50 p.m.	Panel	<b>Policies to Increase PEV markets</b> <b>Moderators -</b> Michael Safoutin, US Environmental Protection Agency <b>Panelists -</b> Michael Berube, US Department of Energy; Robert Bienenfeld, American Honda Motor Co. Inc.; Genevieve Cullen, Electric Drive Transportation Assoc.; Britta Gross, General Motors LLC; Michael J. McCarthy, California Air Resources Board;

## Thursday, January 26

### Crashworthiness

**Session Code:** G107

**Room 145 AB**

**Session Time:** 8:00 a.m.

This session will cover a variety of topics related to vehicle structural designs to improve crashworthiness in various crash modes. Specific topics may include oblique and small overlap crash testing. Associated active and passive occupant restraint systems may be covered. The effects on occupant safety of new materials and joining techniques aimed at lightening or stiffening vehicles may also be covered in this session.

**Organizers -** Jeff Dix, Nissan Motor Co., Ltd.; James Myers, NHTSA

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
8:00 a.m.	ORAL ONLY	<b>Results of NHTSA's Latest Oblique Testing</b> James Saunders, NHTSA
8:20 a.m.	ORAL ONLY	<b>NHTSA's Wheel Chair Safety Testing</b> Aloke Prasad, National Hwy Traffic Safety Admin
8:40 a.m.	ORAL ONLY	<b>Lower Interior Impacts to B-Pillars and Seatbacks</b> Allison E. Loudon, National Hwy Traffic Safety Admin

<b>9:00 a.m.</b>	<b>ORAL ONLY</b>	<b>Comparison of frontal crash modes: IIHS small overlap and NHTSA oblique</b> <i>Rebecca Mueller, Insurance Institute for Highway Safety</i>
<b>9:20 a.m.</b>	<b>ORAL ONLY</b>	<b>Challenges and Opportunities in the Oblique Impact</b> <i>Kurt Fischer, TRW Vehicle Safety Systems Inc.</i>
<b>9:40 a.m.</b>	<b>ORAL ONLY</b>	<b>THOR update for US and Euro</b> <i>Michael Jarouche, Humanetics Innovative Solutions Inc.</i>

## Thursday, January 26

### Vehicle Technologies to Increase Seat Belt Usage

**Session Code:** G108

**Room 145 AB**

**Session Time:** 10:15 a.m.

Presentations in this session focus on analyzing seat belt use trends and evaluating the use of different vehicle technologies designed to increase seat belt usage. Topics cover seat belt interlocks and their associated implementation considerations including test procedures, seat belt reminders and data analysis on seat belt use behavior among the target population for these technologies.

**Organizers -** Robert Pheiffer, InterRegs, Ltd.; Carla Rush, DOT/NHTSA

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
<b>10:15 a.m.</b>	<b>ORAL ONLY</b>	<b>Addressing Non-use of Seatbelts by Part-time Users</b> <i>Shan Bao, University of Michigan</i>
<b>10:39 a.m.</b>	<b>ORAL ONLY</b>	<b>Effectiveness of Enhanced Seat Belt Reminders (ESBRs) in Increasing Observed Seatbelt Use</b> <i>Adele Polson, Westat Inc.</i>
<b>11:03 a.m.</b>	<b>ORAL ONLY</b>	<b>Does Unbelted Safety Requirement Affect Protection for Belted Occupants?</b> <i>Jingwen Hu, Univ. of Michigan - Ann Arbor</i>
<b>11:27 a.m.</b>	<b>ORAL ONLY</b>	<b>The Challenges and Technologies of Seatbelt Interlock Systems</b> <i>Thomas Messner, Takata Safety Systems</i>
<b>11:51 a.m.</b>	<b>ORAL ONLY</b>	<b>Definition and Proposed Test Procedure(s) for an Interlock System</b> <i>Priya Prasad, Prasad Consulting LLC; Scott A. Schmidt, Alliance of Automobile Manufacturers Inc.</i>

## Thursday, January 26

### Automated Vehicles

**Session Code:** G102

**Room 146 AB**

**Session Time:** 8:00 a.m.

Safety principles and operational guidelines for deploying automated vehicles will be covered in this session. Topics will include discussion on strategies to transition control from driver to vehicle; testing methods and performance metrics used to develop automated driving functions; safety and reliability considerations.

**Organizers -** Frank Barickman, National Hwy Traffic Safety Admin; Paul Scullion, Association of Global Automakers Inc.

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
<b>8:00 a.m.</b>	<b>ORAL ONLY</b>	<b>CAMP Automated Vehicle Research (AVR) Project Deliverables</b> <i>Levasseur Tellis, Ford Motor Company</i>

<b>8:20 a.m.</b>	<b>ORAL ONLY</b>	<b>Policy and Self-driving Vehicles</b> Several months ago, the National Highway Traffic Safety Administration (NHTSA) proposed new guidance that provides the initial regulatory framework and best practices for highly automated vehicles and self-driving vehicle systems and also asked the public and stakeholders for input on potential policies. Local Motors was proud to answer DOT's call and submitted this letter focused on three areas: low-speed vehicles, vehicle testing and vehicle classifications. It is Local Motors' belief, acted on through the company's launch of Olli, that the initial phases of testing and piloting of highly automated vehicles should focus on low-speed autonomous vehicles, which are poised to offer the most meaningful and safest applications for transportation. David Woessner, Local Motors International LLC
<b>8:40 a.m.</b>	<b>ORAL ONLY</b>	<b>SAE Level 3 automated vehicles: Driver take-over transition control strategies</b> Dushyant Wadivkar, Robert Bosch LLC
<b>9:00 a.m.</b>	<b>ORAL ONLY</b>	<b>Level 2 Mixed-Function Automation Naturalistic Driving Study</b> Myra Blanco, Virginia Tech. Transportation Institute
<b>9:20 a.m.</b>	<b>ORAL ONLY</b>	<b>Federal Automated Vehicle Policy</b> Joshua Fikentscher, NHTSA
<b>9:40 a.m.</b>	<b>ORAL ONLY</b>	<b>A Method for Evaluating Automated Vehicle Safety</b> John Martin, NHTSA; Sughosh J. Rao, Scott Schnelle, Transportation Research Center Inc.; Frank Barickman, National Hwy Traffic Safety Admin; Joshua L. Every, Transportation Research Center Inc.; Bowen Weng, Transportation Research Center Inc

## Thursday, January 26

### Deploying Connected Vehicles

**Session Code:** G103

**Room 146 AB**

**Session Time:** 10:15 a.m.

This session will give the SAE attendees an update on the Connected Vehicle Pilot Deployment Program. In September 2015, Secretary Foxx announced that New York City, Wyoming, and Tampa, FL were selected to pilot next-generation transportation technology under the Connected Vehicle Pilot Deployment Program. As of September 2016, the three pilot sites have completed the concept development phase and have moved on to the design and test phase.

**Organizers -** Kate Hartman, Federal Highway Administration; Randa Radwan, Citizant Inc

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
<b>10:15 a.m.</b>	<b>ORAL ONLY</b>	<b>Overview of the Connected Vehicle Pilot Deployment Program</b> Kate Hartman, Federal Highway Administration
<b>10:40 a.m.</b>	<b>ORAL ONLY</b>	<b>Challenges to large scale Connected Vehicle Deployment in the Urban Environment, New York City's Connected Vehicle Project: 8,000 vehicles, 400 Roadside Units, 12 Safety Applications</b> Robert G. Rausch, Transcore LP
<b>11:05 a.m.</b>	<b>ORAL ONLY</b>	<b>Improving Safety and Freight Operations in Rural Corridors using Connected Vehicle Technology: Update from Wyoming CV Pilot</b> Deepak Gopalakrishna, ICF International Inc.
<b>11:30 a.m.</b>	<b>ORAL ONLY</b>	<b>Vehicle to infrastructure Deployment in Tampa &amp; The Need for Coordination between Automakers and Infrastructure Owners</b> Bob Frey, Tampa Hillsborough Expressway Authority; Stephen Novosad, HNTB Corp.



11:55 a.m. Panel

**Moderated Discussion**

**Organizers -** Kate Hartman, Federal Highway Administration

**Thursday, January 26**

## **SAE Plenary Session: Smart Cities: What are They and How Do We Get There?**

**Session Code:** G400

**Room 146 AB**

**Session Time:** 3:00 p.m.

This plenary session will focus on the U.S. Department of Transportation's smart city challenge to help cities define what it means to be a Smart City and what it means for the future of the automotive industry. The dialogue will incorporate a panel discussion of transportation policy, funding, and technological initiatives with the integration of autonomous and connected vehicles, as well as, sensor technology. To achieve the national status of a Smart City, a city will need to leverage its initiatives through a fully collaborative effort among the public, private and nonprofit sectors. The panel will provide examples of international initiatives, as well as, domestic public-private partnerships that have been fostering transportation policy and automotive technology integration over the last several years.

**Moderators -** Reuben Sarkar, US Dept. of Energy

**Panelists -** John Augustine, Department Of Transportation; Carla Bailo, Ohio State University; Christopher A. Hart, National Transportation Safety Board; Ian Yarnold, Department For Transport; David Zipper, 1776;

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
	<b>ORAL ONLY</b>	<b>Learn More About the Speaker</b> Christopher A. Hart, National Transportation Safety Board
	<b>ORAL ONLY</b>	<b>Learn More About the Speaker</b> David Zipper, 1776
	<b>ORAL ONLY</b>	<b>Learn More About the Speaker</b> Ian Yarnold, Department For Transport
	<b>ORAL ONLY</b>	<b>Learn More About the Speaker</b> John Augustine, Department Of Transportation
	<b>ORAL ONLY</b>	<b>Learn More About the Speaker</b> Reuben Sarkar, US Dept. of Energy
	<b>ORAL ONLY</b>	<b>Learn More About the Speaker</b> Carla Bailo, Ohio State University

**Thursday, January 26**

## **Panel Discussion: Reconciling Competing Visions on Mobility**

**Session Code:** G209

**Room 146 C**

**Session Time:** 8:00 a.m.

A moderated panel featuring government planners, NGOs, and industry discussing the different, and often competing ideas on what sustainable mobility looks like? Will it be dominated by a move towards Public transit, or will autonomous personal mobility capture the market. What other technologies, policies, and mobility options may emerge and what role does city and state planning play in the outcome?

**Organizers -** William P. Chernicoff, Toyota Motor North America Inc.; Kristin S. Kenausis, US EPA; Rachael Nealer, US Department of Energy

**Moderators -** Russ Brooks, Transportation for America

**Panelists -** Emily Castor, Lyft; Jim Tymon, AASHTO; Vincent Valdes, Department Of Transportation; Jonathan Weinberger, Alliance of Automobile Manufacturers Inc.;

## Thursday, January 26

### On-demand Mobility & Autonomous Vehicles

**Session Code:** G210

**Room 146 C**

**Session Time:** 10:15 a.m.

The session will discuss the current state of research and discuss the policy and how regulations may impact this growing mode of transportation. What might the future of this technology look like, how will autonomous technology play a role, and what regulatory and policy changes are needed

**Organizers -** David Anderson, Department of Energy; John Eichberger, The Fuels Institute; Aaron C. Hula, US Environmental Protection Agency

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
10:15 a.m.	ORAL ONLY	<b>Maximizing Autonomous Vehicle Potential: Public and Private Sector Coordination</b> Avery Ash, Inrix Inc.
10:35 a.m.	ORAL ONLY	<b>Energy Impacts of Connected and Automated Vehicles</b> David Gohlke, US Department of Energy
10:55 a.m.	ORAL ONLY	<b>Autonomous Vehicles and Tailpipe Emissions</b> Josuha Goldman, Union of Concerned Scientists
11:15 a.m.	ORAL ONLY	<b>Research Coordination to Achieve Policy Goals</b> Katherine Kortum, Transportation Research Board
11:35 a.m.	ORAL ONLY	<b>The World Changes: Autonomous Driving Will Give the Change of Urban Mobility a Big Push</b> Markus Tobias Bauer, BMW Group
11:55 a.m.	ORAL ONLY	<b>SAFE's Commission on AV Testing and Safety Outlines Industry-Led Framework for Safe and Expedient Deployment</b> Robert C. Lange, Exponent

## Thursday, January 26

### What's Next for Heavy Duty?

**Session Code:** G200

**Room 147 A**

**Session Time:** 8:00 a.m.

With publication of the final Phase 2 Greenhouse Gas rules for Medium and Heavy Duty Vehicles, future fuel economy and GHG targets have been established. Petitions for lowering NOx emissions in the future however ensure that the emissions debate will continue. This session will sort out the next decade for medium and heavy-duty vehicle technology, providing perspectives on proposals for more stringent standards and lower GHG, legacy fleet considerations and fuel and technology choices.

**Organizers -** Allen Schaeffer, Diesel Technology Forum; Houshun Zhang, EPA

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
8:00 a.m.	ORAL ONLY	<b>Update on US EPA's Recent Regulatory Activities Related to On-highway Heavy-duty Vehicles and Engines</b> Matthew W. Spears, US EPA
8:15 a.m.	ORAL ONLY	<b>View from the Northeast States</b> Matt Solomon, NESCAUM
8:30 a.m.	ORAL ONLY	<b>Challenges and Pathways to New Emissions and Fuel Efficiency Regulations</b> Steve Berry, Volvo Group
8:45 a.m.	ORAL ONLY	<b>The Confidence in Freight Efficiency Technologies</b> Michael D. Roeth, NACFE

<b>9:00 a.m.</b>	<b>ORAL ONLY</b>	<b>Emission Control Technologies for Meeting Future Ultra-Low NOx Standards</b> <i>Rasto Brezny, Manufacturers of Emission Controls Assoc.</i>
<b>9:15 a.m.</b>	<b>ORAL ONLY</b>	<b>SuperTruck II: Making Trucks Greater Again</b> <i>Roland M. Gravel, US Dept. of Energy</i>
<b>9:30 a.m.</b>	<b>Panel</b>	<b>Roundtable Discussion</b>

## Thursday, January 26

### Commercial Vehicle Safety

**Session Code:** G111

**Room 147 A**

**Session Time:** 10:15 a.m.

This session will feature a variety of current and future research areas that can assist industry and government stakeholders understand the technologies as applied in the real-world. The main focus areas will address current crash avoid and next generation crash avoidance and mitigation technologies, the path to automated commercial vehicles, other future safety technologies and research on platooning.

**Organizers -** Leigh S. Merino, Motor & Equipment Mfrs Association; George Reagle; Alrik L. Svenson, NHTSA

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
<b>10:15 a.m.</b>	<b>ORAL ONLY</b>	<b>Field Study of Heavy-Vehicle Crash Avoidance Systems</b> <i>Alrik L. Svenson, NHTSA</i>
<b>10:35 a.m.</b>	<b>ORAL ONLY</b>	<b>Roadmap to Commercial Vehicle Automated Technologies</b> <i>Frederick Andersky, Bendix Commercial Vehicle Systems LLC</i>
<b>10:55 a.m.</b>	<b>ORAL ONLY</b>	<b>Truck Safety Technology: Looking to the Future</b> <i>Ananda Pandey, WABCO North America</i>
<b>11:15 a.m.</b>	<b>ORAL ONLY</b>	<b>Assessing the Feasibility of Deploying Partial Automation for Truck Platooning</b> <i>Osman Altan, US Dept. of Transportation</i>
<b>11:35 a.m.</b>	<b>ORAL ONLY</b>	<b>NTSB's 2017 'Most Wanted' for Commercial Vehicles</b> <i>Robert Molloy, NTSB</i>
<b>11:55 a.m.</b>	<b>Panel</b>	<b>Open Discussion/Questions</b>

## Thursday, January 26

### Panel Discussion: TSCA Implementation and Next Steps

**Session Code:** G204

**Room 147 B**

**Session Time:** 8:00 a.m.

This panel will cover the policies & guidances developed for the newly signed TSCA. Also it will examine the updates in the 2014 TSCA Work Plan to see what the first outputs from TSCA will be and any next steps on how it will be implemented from both the industry and government perspectives.

**Organizers -** Daniel J. Selke, Mercedes-Benz USA LLC; Nakia Simon, FCA US LLC

**Moderators -** Maureen F. Gorsen, Alston & Bird LLP

**Panelists -** Mark Duvall, Beveridge & Diamond PC; Laurie Holmes, Motor & Equipment Mfrs Association; Jeff Morris, US Environmental Protection Agency; Stacy Tatman, Alliance of Automobile Manufacturers Inc.; Mike Walls, American Chemistry Council;

Thursday, January 26

## Beyond TSCA & Next Steps

Session Code: G205

Room 147 B

Session Time: 10:15 a.m.

By reducing GHG and adding ZEV vehicles, OEMs are looking at various new technologies that may require rare precious materials, or ones difficult to recycle / dispose of in their end-of-life cycle. This session addresses several environmental issues (e.g. flame retardants) and will focus on opportunities to explore potential solutions unique to the automotive industry.

Organizers - Daniel J. Selke, Mercedes-Benz USA LLC; Nakia Simon, FCA US LLC

Time	Paper No.	Title
10:15 a.m.	ORAL ONLY	<b>Test Procedures for Evaluation of Interior Materials Flammability</b> Barbara Hennessey, NHTSA
10:45 a.m.	ORAL ONLY	<b>Impact of FMVSS 302 on TSCA - Industry Perspective</b> Scott A. Schmidt, Alliance of Automobile Manufacturers Inc.
11:15 a.m.	ORAL ONLY	<b>Recycling of automotive Li-Ion batteries - Government Perspective</b> Linda Gaines, Argonne National Laboratory
11:45 a.m.	ORAL ONLY	<b>Recycling of automotive Li-Ion batteries - Industry Perspective</b> Roger Miksad, Wiley Rein LLP

Friday, January 27

## Pedestrian Safety

Session Code: G109

Room 145 AB

Session Time: 10:15 a.m.

This session will cover all aspects of pedestrian safety (vehicle crashworthiness, PAEB, infrastructure). This includes research programs aimed at the safety of pedestrians. Presentations will also cover in-vehicle pedestrian detection and avoidance systems. Other presentations will cover vehicle crashworthiness designed to protect pedestrians in the event of a crash, and their effects on vehicle styling. Pedestrian ATDs are covered in this session. Outreach efforts to reduce pedestrian exposures to collisions may be covered.

Organizers - Ana M. Meuwissen, Robert Bosch LLC; Jennifer Morrison, National Transportation Safety Board

Time	Paper No.	Title
10:15 a.m.	ORAL ONLY	<b>Objective Test Procedures for Pedestrian Automatic Emergency Braking Systems</b> Heath Albrecht, VRTC/TRC
10:40 a.m.	ORAL ONLY	<b>Real-World Pedestrian Crashes &amp; Injury Trends and Fatality Risks</b> Peter Grant Martin, National Hwy Traffic Safety Admin; Melissa R. Pfeiffer, MRP Consulting
11:05 a.m.	ORAL ONLY	<b>From Collision Avoidance to Big Data</b> Uri Tamir, Mobileye
11:30 a.m.	ORAL ONLY	<b>Path to Safer Mobility</b> Boris Shulkin, Magna
11:55 a.m.	ORAL ONLY	<b>Car-to-Cyclist Accidents from the Car Driver's Point of View</b> Anja Schneider, Thorsten Leonhardt, Audi AG

Friday, January 27

## Opening Keynote Address

Session Code: GIKEYNOTE2

**Room 146 AB**

**Session Time: 9:00 a.m.**

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
9:00 a.m.	ORAL ONLY	<b>Learn More About the Keynote</b> <i>Nathaniel Beuse, National Hwy Traffic Safety Admin</i>

## Friday, January 27

### Crash Avoidance Technology

**Session Code: G104**

**Room 146 AB**

**Session Time: 10:15 a.m.**

Presentations on new technologies and the implementation of new solutions to mitigate vehicle collisions will be given in the session. Topics may include driver assistance and strategies to limit false alarms. Presentations on longer term technologies for vehicles of the future may also be given.

**Organizers -** *Elizabeth Mazzae, National Hwy Traffic Safety Admin; Rini Sherony, Toyota Motor Corp.*

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
10:15 a.m.	ORAL ONLY	<b>Recent NHTSA Lane Keeping Support Research</b> <i>Taylor Manahan, Department Of Transportation</i>
10:35 a.m.	ORAL ONLY	<b>Analysis of the Run-Out-of-Lane Problem Using Real-World Crash Data</b> <i>Joshua Fikentscher, NHTSA</i>
10:55 a.m.	ORAL ONLY	<b>AAA's Testing Protocols for Blind Spot Monitoring and AEB Systems</b> <i>Gregory D. Brannon, AAA American Automobile Association</i>
11:15 a.m.	ORAL ONLY	<b>Intersection Advanced Driver Assistance System: Scenarios and Benefit Estimation</b> <i>Rini Sherony, Toyota Motor Corp.</i>
11:35 a.m.	ORAL ONLY	<b>Recent NHTSA Research on Rear Automatic Braking</b> <i>Elizabeth Mazzae, National Hwy Traffic Safety Admin; George Scott Baldwin, Adam Andrella, Transportation Research Center Inc.</i>

## Friday, January 27

### Global Harmonization

**Session Code: G201**

**Room 147 A**

**Session Time: 10:15 a.m.**

This session will address progress being made in harmonizing regulations, standards and compliance structures in the US and other countries in emissions, environment, safety and security activities. Case studies of are included to showcase the challenge and best practice opportunities in global harmonization that could be transferable to future efforts.

**Organizers -** *Laurie Holmes, Motor & Equipment Mfrs Association; Arman Tanman, US Environmental Protection Agency; Stacy Tatman, Alliance of Automobile Manufacturers Inc.*

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
10:15 a.m.	ORAL ONLY	<b>Industry Perspectives on Possible Further Improvements to the 98 Agreement GTR Process</b> <i>Scott A. Schmidt, Alliance of Automobile Manufacturers Inc.</i>

10:35 a.m.	ORAL ONLY	<b>The Automotive Regulatory Framework and the Challenges of Global Harmonization</b> <i>Henrique Martins, Mahindra North American Technical Center</i>
10:55 a.m.	ORAL ONLY	<b>Trade Negotiations &amp; Regulatory Harmonization - Recommendations for the New Administration</b> <i>Jennifer Thomas, Alliance of Automobile Manufacturers Inc.</i>
11:15 a.m.	ORAL ONLY	<b>SAE: the Driving Force in Global Cybersecurity Standards</b> <i>Timothy Weisenberger, SAE International</i>
11:35 a.m.	ORAL ONLY	<b>Horizon 2020 as a model for innovation in regulation benchmarking</b> <i>Amandine Muskus, Association of Global Automakers Inc.</i>
11:55 a.m.	ORAL ONLY	<b>Role of Government in Global Harmonization</b> <i>Martin Koubek, DOT/NHTSA</i>

## Friday, January 27

### Panel Discussion: Liquid Fuels

**Session Code:** G206

**Room 147 B**

**Session Time:** 10:15 a.m.

The vast majority of vehicles on the road today are powered by liquid fuels, and forecasts project liquid fuel-powered internal combustion engines will continue to be in the mainstream for the next several decades. As fuel evolution progresses, we must consider how these altered fuels might affect legacy vehicles, integrate with the existing distribution system and satisfy consumer preferences and behaviors. This session will address current and future state fuels and their impact on technology

**Organizers -** Paul N. Argyropoulos, US Environmental Protection Agency; John Eichberger, The Fuels Institute; Michael Weismiller, Department of Energy

<b>Time</b>	<b>Paper No.</b>	<b>Title</b>
10:15 a.m.	ORAL ONLY	<b>Key Elements and Barriers for Future Fuels</b> <i>Michael McAdams, Advanced Biofuels Association</i>
10:25 a.m.	ORAL ONLY	<b>Biomass-Based Diesel: Advancing de-carbonization in the liquid fuel marketplace</b> <i>Daniel Oh, Renewable Energy Group Inc.</i>
10:35 a.m.	ORAL ONLY	<b>What's New with Diesel Combustion and Fuels?</b> <i>Charles Mueller, Sandia National Laboratories</i>
10:45 a.m.	ORAL ONLY	<b>A Retailers Perspective on Changing the Liquid Fuel Mix</b> <i>Mike Lorenz, Sheetz Inc.</i>
10:55 a.m.	ORAL ONLY	<b>Fuel Properties for Advanced Clean High-Efficiency IC Engines</b> <i>Arun Solomon, General Motors</i>
11:05 a.m.	Panel	<b>Panel Discussion</b>